Collibra

Industry solution brief

Collibra Data Intelligence Platform for Energy and Utilities

Overcoming data challenges

Energy and utilities organizations operate in a highly complex data landscape with petabytes of data residing in hundreds of disparate data sources spread across an on-premises and multi-cloud environment.

In this type of data ecosystem, it is very difficult for data citizens — including chief data officers, data scientists, data governance leads, data engineers and data consumers — to easily find or understand the data they need. Users are unable to ascertain if the data comes from a trustworthy source and whether it is certified for use. They are unable to obtain detailed information about the data such as its attributes, where did it originate from, who owns the data and whether it is of high or poor quality.

Moreover, changing consumer behavior and energy consumption patterns increasingly necessitate the use of trustworthy data to derive accurate insights to drive innovation. This will require rapid access to a wide variety of data including network, operations, distribution, Internet of Things (IoT), customer, third-party and market data, finance, sales, call data records, and more.

For any oil and gas, renewable energy or utilities provider, the inability to find the right data in a timely manner coupled with data integrity issues, a lack of data governance, transparency and traceability of data can elevate both operational and regulatory non-compliance risks.

Collibra Data Intelligence Platform is an intelligent data platform that leverages the power of machine learning and provides a holistic and integrated approach to cataloging, governing, protecting, managing and collaborating with data at scale across on-premises, hybrid and multi-cloud environments.

Speed innovation with trusted data

With Collibra Data Intelligence Platform, you can build a common foundation for data. By leveraging AI-powered capabilities and advanced automation in modern data management, you can overcome data silos, improve data literacy (understanding of data) and enable data integrity at scale.

Leading energy and utilities providers rely on Collibra to better understand energy consumption and demand patterns, optimize operations, mitigate risks and speed time-toinsights. Collibra Data Intelligence Platform is a foundational pillar for enabling missioncritical applications and supporting strategic business imperatives such as:



Enable strategic use cases



Accelerate data democratization and self-service analytics

- Empower data citizens to rapidly discover, understand and collaborate with fully governed data that's primed for self-service analytics and AI use.
- Enable a federated data marketplace built on a modern data mesh architecture for faster time-to-insights.
- Leverage popular business intelligence (BI) tools such as Tableau in conjunction with Collibra Data Catalog and enable data citizens to obtain a more complete view of data with detailed information at a granular level.
- Use trustworthy data to make better and more informed decisions faster across energy and utilities operations, finance, sales, customer experience management, and more.



Figure 1: Easily collaborate with data leveraging crowdsourcing capabilities



Enable explainable AI and build models you can trust

- Create a trusted repository of metadata (data about data) that includes AI model techniques, data inputs, data features, expected outputs and more.
- Empower data scientists to easily discover trustworthy data with rich business and technical context so they can build robust data pipelines and train AI models to accurately predict energy prices, track and understand energy consumption and forecast demand.
- Trace lineage of datasets and models with detailed information to better understand data transformations throughout the data lifecycle.
- Leverage machine learning (ML)-enabled data quality and observability to help detect data drift, outliers and patterns to ensure accuracy and performance of AI and analytics models over time.



Drive transparency and data integrity across your processes

- Implement systematic data governance, quality and privacy controls that remove human error and mitigate operational and regulatory non-compliance risks.
- Proactively detect anomalies and inaccuracies in data such as customer information, 3rd party and market data, network, billing, financial information, and more.
- Meet stringent regulatory requirements for data collection, processing, storage, retention and usage as well as data privacy and security with comprehensive audit trails.
- Easily locate, classify and protect sensitive customer data including Personally Identifiable Information (PII) with rolebased access control.

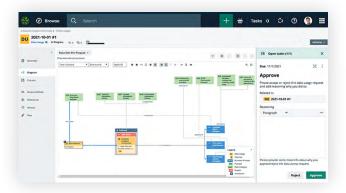


Figure 2: Visualize and understand data dependencies from source to target with end-to-end data lineage



- Quickly determine what impact migrating a particular dataset may have on upstream and downstream systems, as well as prioritize migration of datasets in the right sequence.
- Maximize the impact of your data migration by setting up controls to ensure that only clean data that meets your data integrity standards is migrated to the cloud.
- Simplify data onboarding to maximize productivity by cataloging and managing the data in your data lake and data warehouse from a single centralized location.
- Obtain end-to-end visibility into the data in your data lake and modern data warehouses — such as Amazon Redshift, Snowflake, Google BigQuery, and more.





The Collibra Data Intelligence Platform Advantage



Energy and utilities providers globally rely on Collibra Data Intelligence Platform to gain in-depth visibility into their data ecosystem across on-premises, hybrid and multi-cloud environments, without moving data, so that data assets stay protected.

Govern. Trust. Access.

Data Catalog	Data Lineage	Data Governance	Data Quality	Data Privacy
 Catalog ML curation Ratings / reviews Data marketplace 	 Business lineage Technical lineage Impact analysis 	 Business glossary Stewardship Data dictionary Reference data Data helpdesk 	 Continuous monitoring Adaptive rules 	• GDPR • CCPA
Active metadata g	raph			
Core services				
Flexible operating model	Antive connector		Reports and lashboards	Collibra - everywhere
Workflow engine	Collabora	tion API A	'PIs :	Collibra Insights

Data will be at the core of our digital transformation, giving all of us the opportunity to discover better ways of serving our customers.

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Core capabilities

Rapid data discovery and BQ self-service data access

- The intelligent data catalog is purpose-built to empower data citizens, so they can easily find and understand the data they need with rich business and technical context. With built-in crowdsourcing capabilities, users can easily collaborate on data. They can rate, comment on, and prioritize data sets for use as well as provide feedback.
- · A powerful contextual search engine and easy-to-use, intuitive data shopping experience enables data citizens across the organization to easily locate and shop for fully-governed and trustworthy data they need.



End-to-end data lineage and visibility

- Automated data lineage enables data citizens to dynamically visualize the flow of data from source to target as well as understand all the data dependencies at a granular level.
- For instance, data citizens can better understand how risk models are computed and trace lineage of each data set with rigorous audit trails for reporting purposes. An active metadata graph that connects business, technical and privacy metadata with data quality and lineage - provides rich content and context to users.

Predictive data quality and data integrity at scale

- · Machine learning (ML)-powered data quality and observability enables proactive detection of anomalies in data such as missing records, values as well as broken relationships across tables or systems resulting in rapid resolution.
- · If data quality drops below a set threshold, Collibra automatically creates a data quality issue and notifies the right people to handle the issue according to the desired priority level.

Comprehensive and adaptive data governance

- · Collibra data governance is a one-stop-shop for data, regulatory compliance, AI and analytics governance. Built-in data governance enables users to develop a consistent data taxonomy that includes regulatory specific rules, physical and/ or logical data dictionary, glossary of terms, out-of-the box data domains, and more.
- Pre-built templates, reference data management, stewardship management and intuitive workflows enable automation of governance processes and provide a framework for crossfunctional teams to establish a common understanding of data to ensure consistency.

Embedded privacy by design and data protection

- With Collibra, energy and utilities providers can enforce comprehensive data privacy and protection policies in adherence with regulatory stipulations and corporate best practices for data retention and usage.
- ML-powered automation enables rapid classification of data by category, sensitivity and user type at scale. Advanced capabilities in data privacy and protection will help ensure sensitive data is easily identified and protected with role-based access control.

Collibra is the Data Intelligence company

For more information, visit us at collibra.com

We accelerate trusted business outcomes by connecting the right data, insights and algorithms to all Data Citizens. Our cloud-based platform connects IT and the business to build a datadriven culture for the digital enterprise. Global organizations choose Collibra to unlock the value of their data and turn it into a strategic, competitive asset. We have a diverse global footprint, with offices in the US, Belgium, Australia, France, UK, Czech Republic and Poland.